

Home ➤ Methodologies ➤ Employee Earnings and Hours, Australia methodology ➤ May 2023



Employee Earnings and Hours, Australia methodology

Reference period May 2023

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On this page

Introduction

Data collection

Data processing

Data output

Comparability

History of changes

Glossary

Quality declaration - summary

<u>Technical note - sampling error</u>

Abbreviations

Short Survey of Employment Conditions (SSEC) experimental estimates

Introduction

This release contains estimates from the 2023 Survey of Employee Earnings and Hours (EEH) which was conducted with respect to the last pay period on or before 19 May 2023.

The EEH survey is conducted every two years and designed to provide detailed statistics on the composition and distribution of employee earnings, hours paid for and the methods used to set employees' pay. Information is collected from a sample of employers about characteristics of both the employers (such as industry and sector) and their employees (such as occupation, type of employee, and method of setting pay). This information is used to provide comprehensive statistics about earnings and hours paid for, for various groups of

employees, classified by, for example, industry, occupation or pay setting method.

Estimates of employee earnings produced from the EEH Survey presented in this publication are based on the Australian conceptual framework for measures of employee remuneration. From 2006, the measure of employee earnings for estimates produced from the survey is regular wages and salaries in cash (including amounts salary sacrificed, where it is the choice of the employee to forgo part of wages and salaries in cash in return for goods and services), that is, cash earnings. Descriptions of the underlying concepts of employee earnings, hours paid for and methods of setting pay, and the sources and methods used in compiling these estimates, are presented in Labour Statistics: Concepts, Sources and Methods (/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/latest-release).

Data collection

Scope and coverage

The survey covers all employing organisations in Australia (public and private sectors), except:

- the Australian permanent defence forces;
- enterprises primarily engaged in agriculture, forestry and fishing;
- private households employing staff; and
- foreign embassies, consulates, etc.

The employees of businesses selected in the survey are in scope if they received pay for the reference period, except:

- employees paid solely under the Australian Government's Paid Parental Leave Scheme;
- employees who did not receive pay for the reference period (e.g. casuals who did not work during the reference period);
- non-salaried directors;
- working proprietors and partners of unincorporated businesses;
- self-employed persons such as subcontractors, owner/drivers or consultants;
- persons paid by commission only;
- employees based outside Australia; and
- employees on workers' compensation who are not paid through the payroll.

Collection method

Details of the total number of employees, characteristics, earnings, hours paid for and pay

setting methods for the survey reference week are obtained on a biennial basis from selected businesses. Data are collected via online electronic collection.

Follow-up procedures are in place to obtain information from respondents who do not lodge a completed form by the due date. The target minimum response is 90%.

Sample design and size

The sample is selected from the ABS Business Register (ABSBR) which is a list of businesses and organisations operating in Australia primarily based on registrations to the Australian Taxation Office's (ATO) Pay-As-You-Go Withholding (PAYGW) scheme. The population is updated quarterly to take account of new businesses, businesses that have ceased employing, changes in industry and employment levels and other general business changes.

The survey uses a two-stage sample selection approach. The first stage involves selecting a probability sample of statistical units (employing businesses) drawn from the ABSBR. The statistical unit for the survey comprises all the activities of an employer in a particular state or territory based on the Australian Business Number (ABN) unit or Type of Activity Unit (TAU). Each statistical unit is classified to an industry which reflects the predominant activity of the business. Variables used to stratify the survey frame are:

- public/private sector;
- industry;
- state/territory; and
- employment size the ranges used vary between states/territories and industries.

Statistical units with benchmark employment greater than a set cut off (this cut off will vary for different states/territories) are completely enumerated. Strata with a very small number of statistical units may also be completely enumerated, but such strata may become sampled strata if the number of units increases sufficiently. Within each stratum, statistical units are selected with equal probability. A sample of approximately 8,300 employer (selection) units was selected to ensure adequate industry and state/territory representation.

Sample selection is constrained by ensuring that there is minimum overlap with other labour-related business surveys.

For details on the ABS Business Register and ABS economic units model, see the <u>Business surveys</u> (/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/2023/methods-four-pillars-labour-statistics/business-surveys) section in Labour Statistics: Concepts, Sources and Methods.

In the second stage, the selected employers are asked to select a random sample of employees from their payrolls using instructions provided by the ABS. Data for approximately 54,000 employees contributed to the results in this publication.

Use of Australian Business Register (ABR) data

The results of these studies are based, in part, on ABR data supplied by the Registrar to the ABS under A New Tax System (Australian Business Number) Act 1999 (https://www.legislation.gov.au/C2004A00467/2022-06-22/text) which requires that such data is only used for the purpose of carrying out functions of the ABS. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes, and is not related to the ability of the data to support the ABR's core operational requirements.

Legislative requirements to ensure privacy and secrecy of this data have been followed. In accordance with the <u>Census and Statistics Act 1905 (https://www.legislation.gov.au/C1905A00015/latest/text)</u>, results have been confidentialised to ensure that they are not likely to enable identification of a particular person or organisation.

Data processing

Industry classification

The statistics in this release are classified to industry in accordance with the <u>Australian and New Zealand Standard Industrial Classification</u>, 2006 (Revision 2.0) (/statistics/classifications/australian-and-new-zealand-standard-industrial-classification-anzsic/2006-revision-2-0). This replaced the 1993 edition of ANZSIC in the August 2008 issue of this publication, which had been in use since 1994.

The 2006 edition of ANZSIC was developed to provide a more contemporary industrial classification system, taking into account issues such as changes in the structure and composition of the economy, changing user demands and compatibility with major international classification standards.

Occupation classification

Each employee in the survey is classified to an occupation based on their job title and duties. The classification used in this release is <u>Australian and New Zealand Standard Classification of Occupations</u>, 2022 (/statistics/classifications/anzsco-australian-and-new-zealand-standard-classification-occupations/2022). Historic cycles of EEH have used the following classifications:

• May 2021 - Australian and New Zealand Standard Classification of Occupations, 2013,

Version (1.3) (https://www.abs.gov.au/ausstats/abs@.nsf/mf/1220.0)

- May 2014 to May 2018 <u>Australian and New Zealand Standard Classification of Occupations</u>, 2013 (Version 1.2) (https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/4AF138F6DB4FFD4BCA2571E200096BAD?opendocument)
- May 2006 to May 2012 <u>Australian and New Zealand Standard Classification of Occupations (First Edition) (https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/F6A0BB67C088F217CA2575DF001CADC7?opendocument)</u>
- May 1996 to May 2004 <u>Australian Standard Classification of Occupations 1997 (Second Edition) (https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/4B8C877612EC0AE4CA2571E5007A6B27?opendocument)</u>

Managerial status

Employees have been classified as managerial if they have strategic responsibilities in the conduct or operations of the business and/or were in charge of a significant number of employees. These employees usually do not have an entitlement to paid overtime.

Care should be taken when comparing survey estimates based on ANZSCO groups with estimates based on the managerial status of employees. Estimates for employees with managerial status include employees classified to ANZSCO categories other than the ANZSCO major group Managers; e.g. employees classified as Professionals according to ANZSCO may be categorised by employers as having managerial status. Conversely, tables in this publication which contain estimates for non-managerial employees (as defined by employers) include some employees classified to the ANZSCO major group Managers.

Methods of setting pay

The Method of setting pay (MOSP) identifies how an employee's pay is set. Methods are classified to one of the following categories: Award only; Collective agreement; Individual arrangement; or Owner manager of incorporated enterprise.

Award only

Awards are legally enforceable determinations which set out minimum terms and conditions of employment, in addition to any legislated minimum terms. Decisions relating to awards and associated rates of pay are determined by a Federal or State industrial tribunal or authority. Awards may be applied for discrete industries or occupations and include a minimum rate of pay. Awards are periodically reviewed by the relevant governing body, where consultation and submissions from interested parties may be heard.

Employees that negotiate rates of pay in excess of the award rate are classified as paid by Collective agreement or Individual arrangement for EEH purposes.

Key requirements in determining an Award:

- Terms and conditions, including wage rises, decided independently from interested parties by a State or Federal industrial tribunal or authority.
- Employees are not classified to Award if they are paid more than the rate of pay specified in the award.

Collective agreement (also known as enterprise agreement)

A Collective agreement is a negotiated agreement made at the enterprise level between an employer and group of employees. Nominated representatives are able to negotiate for either party, such as a union representing the employees or an employer nominating a person in writing, such as a manager or an agent of an industrial relations law firm. A Collective agreement can be registered with an industrial tribunal and must include a set term of operation and nominated date of expiry. An expired Collective agreement will continue to apply until terminated by the industrial tribunal or replaced by the parties.

Key requirements in determining a Collective agreement:

- Sets terms and conditions of employment through negotiated agreement by an employer and group of employees.
- Contains a set period of operation including a date of expiry but continues to apply until terminated or replaced.

Individual arrangement (also known as individual agreement)

Employees covered by an Individual arrangement will have their wages and conditions set on an individual basis. This can include informal arrangements, such as handshake or ad hoc arrangements, and also written contracts or arrangements that have not been lodged with an authority. An Individual arrangement can also be referred to as a common law contract.

Key requirements in determining an Individual arrangement:

- One-on-one arrangement between employer and employee setting the wage rates and conditions of employment on an individual basis.
- Individual arrangements generally offer a set of terms and conditions above relevant state or national awards. Arrangements set to the National Minimum Wage in conjunction with the national legislated minimum conditions (National Employment Standards) are recorded as Individual arrangements.

Owner manager of incorporated enterprise

Owner managers of incorporated enterprises determine their own rate of pay. An incorporated enterprise is a business entity which is registered as a separate legal entity to

its members or owners (also known as a limited liability company). Owner managers of incorporated enterprises are presented separately in estimates by Method of setting pay.

Data output

Available data

As the information in EEH is collected from businesses at the individual employee level, it is possible to derive measures of distribution (e.g. medians, deciles, earnings ranges) and provide some information on individual characteristics of employees based on data items collected.

Earnings data are available for average weekly and hourly total and ordinary time cash earnings based on hours paid for during the reference pay period. This includes work done (e.g. piece rates or regular bonuses) and time on leave (e.g. annual or sick leave). Cash earnings are gross amounts (i.e. before tax) and include amounts salary sacrificed (where the employee chooses to forgo part of their wages and salaries in cash in return of goods and services). Irregular and infrequent payments, such as annual bonuses, payments in kind, leave loading, severance and termination payments are excluded from the estimates.

Data are also available for ordinary time and total hours paid for. Ordinary hours include award, standard or agreed hours of work, paid for at ordinary time rates. Total hours paid for is the sum of ordinary time hours paid for plus overtime hours paid for during the reference period, where overtime hours are those in excess of award, standard or agreed hours of work.

Mean or average measures are available for the following:

- Weekly cash earnings (ordinary time and total);
- Weekly hours paid for (ordinary time and total);
- Hourly cash earnings (ordinary time and total); and
- Age (available from 2014 on).

When analysing earnings data, which has a skewed distribution with a long tail, the median is a better measure of 'central tendency' than the mean. Mean earnings are usually higher than the median earnings as relatively small numbers of highly paid employees can skew the mean higher. The larger the gap between mean and median earnings for a group of employees, the more uneven the distribution of earnings tends to be. A lower median indicates a greater proportion of employees have earnings below the mean, at the lower end of the distribution.

In addition to the individual employee characteristics, the data are available at employee level by characteristics of their employer including:

- state and territory;
- employer size;
- industry; and
- sector.

The data item definitions used in EEH earnings statistics do not necessarily correspond with definitions used in employment legislation, awards and other instruments.

Rounding

Estimates of average earnings shown in the tables and data cubes are rounded to the nearest 10 cents and those of average weekly hours paid for are rounded to the first decimal place. Where figures have been rounded, discrepancies may occur between sums of the component items and totals. Cell annotations have been applied based on unrounded data for tables in this release.

Employee estimates

Estimates of numbers of employees by method of setting pay are presented in this release, to add context to other estimates by method of setting pay. Care should be taken in the interpretation and use of such estimates, as the Survey of Employee Earnings and Hours is not designed specifically to produce estimates of numbers of employees. Consideration should be given to the level of variance of the estimates of numbers of employees, which are available from the standard error tables in the Excel spreadsheet available from the Data downloads section of this release. Users are directed to Labour Force, Australia (/ statistics/labour/employment-and-unemployment/labour-force-australia/latest-release) as the primary source for official ABS estimates of employment.

Microdata

A TableBuilder and detailed microdata product will be made available for the 2023 Survey of Employee Earnings and Hours. Further information about EEH microdata can be found in Microdata and TableBuilder: Employee Earnings and Hours, Australia (/statistics/microdata-tablebuilder/available-microdata-tablebuilder/employee-earnings-and-hours-australia).

Comparability

2023 update to average hourly earnings

The method of producing average hourly earnings estimates has been updated for EEH 2023 to enable greater coherence with other ABS published estimates.

The previous method derived average hourly earnings by dividing the sum of weighted weekly earnings by the sum of weighted weekly hours paid for. The updated method divides the sum of weighted hourly earnings for each employee by the sum of weighted number of employees.

As a result, there are some differences in average hourly earnings attributable to the updated method for 2023, when compared to the previous method. The magnitude of these differences is highlighted in the Comparison of average hourly earnings table below.

The updated method will continue to be used for future EEH cycles (2023 onwards).

Comparison of average hourly earnings

May 2023, non-managerial employees, average hourly total cash earnings - state, industry, sex

	Previous method	Updated method (a)	Difference
State			
New South Wales	\$46.10	\$44.60	3.4%
Victoria	\$45.20	\$43.90	2.8%
Queensland	\$44.40	\$42.70	3.9%
South Australia	\$42.30	\$41.40	2.1%
Western Australia	\$48.20	\$45.80	5.0%
Tasmania	\$41.30	\$40.30	2.5%
Northern Territory	\$46.30	\$44.80	3.2%
Australian Capital Territory	\$50.60	\$48.20	4.7%
Industry			
Mining	\$68.40	\$69.10	1.19
Manufacturing	\$41.70	\$40.80	2.19
Electricity, gas, water and waste services	\$57.60	\$57.30	0.69
Construction	\$45.70	\$45.00	1.69
Wholesale trade	\$43.50	\$42.50	2.39
Retail trade	\$32.80	\$31.40	4.29
Accommodation and food services	\$31.40	\$29.10	7.49
Transport, postal and warehousing	\$44.40	\$43.80	1.5%
Information media and telecommunications	\$58.10	\$56.60	2.5%
Finance and insurance services	\$52.20	\$51.50	1.39
Rental, hiring and real estate services	\$42.50	\$41.00	3.5%
Professional, scientific and technical services	\$54.20	\$53.00	2.29
Administrative and support services	\$41.70	\$40.40	3.0%
Public administration and safety	\$50.70	\$50.20	1.09
Education and training	\$51.30	\$51.60	0.5%
Health care and social assistance	\$47.60	\$47.20	0.79
Arts and recreation services	\$39.30	\$37.60	4.29
Other services	\$36.00	\$35.10	2.69
Sex			
Males	\$47.50	\$46.10	2.99
Females	\$43.40	\$42.00	3.19

	Previous method	Updated method (a)	Difference
All non-managerial employees	\$45.60	\$44.00	3.5%

(a) as published for 2023

Comparability to previous EEH data

For the May 2014 Survey of Employee Earnings and Hours, the item Adult or Junior employee was modified, and further categories included. The new item 'rate of pay' has the following categories: adult rate; junior rate; apprentice or trainee rate; and disability rate. The previous Adult category included those employees aged 21 years and over who are not paid the full adult rate of pay for their occupation, which includes those paid an apprentice/ trainee or disability rate of pay. To a lesser extent, the previous Junior category included some employees aged under 21 who, while not paid an age related rate of pay, were not paid the full adult rate of pay, such as those paid an apprentice/trainee or disability rate of pay. This conceptual change has little impact on the estimate of earnings for employees paid at the Junior rate and is not statistically significant when the Adult rate is compared to the Adult category.

However, previous estimates for Employees paid at the adult rate of pay are not directly comparable to estimates produced in prior cycles for Adult Employees. In particular, results for Full-time non-managerial employees paid at the adult rate of pay are not directly comparable to results for Full-time non-managerial adult employees, due to the reasons described above. The closest approximation to allow comparison with data from 2012 and before would be to apportion those employees paid at the Apprentice/Trainee Rate and Disability Rate to the Adult or Junior categories based on the employee's reported age. Data on this broader aggregation of the rate of pay data item are presented in the Supplementary Analysis (https://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/6306.0Main%20Features6May%202014?

opendocument&tabname=Summary&prodno=6306.0&issue=May%202014&num=&view=) in the May 2014 release in order to assist users interpret the difference between the two concepts.

Additionally for May 2014, two further changes were made to data collection. Actual age replaced age range reporting and enabled the derivation of average age data. Collection of hours paid for was extended to include Managerial employees where possible.

From May 2006, estimates of employee earnings from the Survey of Employee Earnings and Hours have been produced on a cash basis, that is, inclusive of amounts salary sacrificed.

This differs from estimates provided in previous issues, which excluded amounts salary sacrificed by employees. Estimates from the May 2004 and May 2002 surveys were reproduced on the new conceptual basis, and broad level estimates for these years were included in the electronic data release accompanying the May 2006 publication.

Comparability to other data sources

Caution should be exercised when comparing estimates of numbers of employees from the Survey of Employee Earnings and Hours with those published monthly in Labour Force, Australia (/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release) as there are a number of differences between the two collections. The Survey of Employee Earnings and Hours is a business survey that collects information from a sample of employers about their employees, whereas the Labour Force Survey is a household survey that collects information from the occupants of selected dwellings. The two collections use different sample design and survey methodologies and there are differences in scope and coverage. Users are directed to Labour Force, Australia (/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release) as the primary source for official ABS estimates of employment. Detailed information about the concepts, sources and methods of the Survey of Employee Earnings and Hours and Labour Force Survey can be found in Labour Statistics: Concepts, Sources and Methods (/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/latest-release).

Care should be taken when comparing estimates of average weekly earnings from the Survey of Employee Earnings and Hours with those published biannually in Average Weekly. Earnings, Australia (/statistics/labour/earnings-and-working-conditions/average-weekly-earnings-australia/latest-release). Headline estimates of average weekly earnings in that publication are presented on the previous conceptual basis (i.e. exclusive of amounts salary sacrificed), although Average Weekly Cash Earnings (inclusive of salary sacrifice) are available in data cubes accessed via the Data downloads section of Average Weekly. Earnings, Australia (/statistics/labour/earnings-and-working-conditions/average-weekly-earnings-australia/latest-release). Additionally, the two collections use different sample design and survey methodologies. The Survey of Average Weekly Earnings collects information relating to the total gross earnings and the total number of employees of employer businesses selected in the survey. The average weekly earnings measures are derived by dividing total gross earnings by the number of employees. The Survey of Employee Earnings and Hours collects information about weekly earnings of a sample of employees within the employer businesses selected.

In addition to the Survey of Employee Earnings and Hours, the ABS produces earnings

statistics from a number of different sources (both household and employer surveys) which provide a wide range of data for a variety of purposes. The decision on which data to draw upon depends on the purpose and type of analysis to be undertaken. For further information on these other sources, please refer to the Earnings guide (/statistics/understanding-statistics/guide-labour-statistics/earnings-guide).

History of changes

Caution should be exercised when comparing data between different years as EEH is not designed as a time series. Changes to survey methods, survey concepts, data item definitions, frequency of collection, and methods of time series analysis, are made as infrequently as possible. Key changes have included:

History of changes

2023

- Update to method of producing average hourly earnings.
- Expansion of distributional data earnings ranges in data cubes 3 and 8.

2021

- Method of setting pay categories 'Award' and 'Collective agreement' uncollapsed for all employees.
- TableBuilder and DataLab released as standard additional statistical products. Select historical cycles were also made available in these environments, see Microdata and TableBuilder: Employee Earnings and Hours, Australia (/statistics/microdata-tablebuilder/available-microdata-tablebuilder/employee-earnings-and-hours-australia).

2018

To support comparative analysis over time for methods of setting pay, the ABS has
published some high level indicative comparable estimates in the feature article 'A Guide
to Understanding Employee Earnings and Hours Statistics (/articles/guideunderstanding-employee-earnings-and-hours-statistics) in Employee Earnings and
Hours, Australia, May 2018. See Appendix 1.

2016

- Method of setting pay categories 'Award' and 'Collective agreement' were combined for all employees.
- Age category was modified for select publication outputs only.
- Overtime earnings and hours paid for data were no longer included in publication

outputs.

• Standard errors were included for percentile tables in data cubes 3 and 8.

2014

- The item 'Adult/Junior employee' was modified, and further categories included.
- The actual age of employees was collected for the first time. Previously the information on age was collected only as 'under 18 years', '18 years and under 21 years' and '21 years and over'.
- Hours paid for data were requested for all employees, including Upper level managers
 and Owner managers of incorporated enterprises. Previously hours paid for data was
 collected only for non-managerial employees. Hours paid for could not be provided for
 Managerial employees where there was no relationship between earnings and hours. As
 a result, estimates of hours paid for and hourly cash earnings have only been produced
 for employees with a link between earnings and hours.
- 'Rate of pay' was collected in four categories: Adult; Junior; Apprentice or trainee; and Disability. The disability rate of pay category does not measure all employees with a disability, only those paid at a specified disability rate. The disability rate of pay is based on the definition in the Fair Work Commission's National Minimum Wage Order.
- In prior EEH surveys, separate data were produced for Adult and Junior employees. Adult employees were defined as employees who are 21 years of age or over, and employees under 21 years old who are paid at the full adult rate for their occupation. Adult employees included employees aged 21 years of age or over on Apprentice or trainee and Disability rates of pay.
- The category 'employees paid at the adult rate of pay' only includes those employees paid the full adult rate of pay, regardless of age. All other rates of pay are excluded.
- Results for May 2014 have been produced on a new conceptual basis: full-time non-managerial employees paid at the adult rate of pay has been used instead of full-time non-managerial adult employees.

2012

• Introduction of online electronic collection as an option to the mail-out/mail-back (paper) questionnaire.

2010

- 'Working proprietor of an incorporated business' sub-category of the methods of setting pay data item changed to 'Owner manager of incorporated enterprise'.
- Release of additional data cubes.
- From 2010, additional estimates of numbers of employees published.

2008

- Industry data classified according to Australian and New Zealand Standard Industrial Classification. 2006.
- Data on methods of setting pay presented on new jurisdictional basis to reflect the new workplace relations environment.
- Survey run in August, and the reference period for the survey is August 2008.

2006

- Estimates of cash earnings now include amounts salary sacrificed (see Information Information (Information <a href="https://www.abs.gov.au/ausstats/abs.gov.au/ausstats/abs.gov.au/ausstats/abs.gov.au/ausstats/abs.gov.ausstats/abs
- Changes made to employee type question ('permanent' and 'fixed-term' separately collected).
- Confidentialised Unit Record File (CURF) produced.

2004

- Introduction of new statistical units model.
- Changes made to employee type question (combined 'permanent' and 'fixed-term').
- Base pay, taxable allowances and payment by measured result no longer collected separately.
- Introduction of grouped Jack-knife method for calculation of variance estimates.
- Working proprietors of incorporated businesses separated from other employees with individual arrangements in method of setting pay classification.

2002

- How employees' pay is set questions redeveloped.
- Changes made to employee type question (replaced 'temporary' with 'fixed-term').
- Question introduced on amounts salary sacrificed.
- Sample re-designed to minimise overlap with the AWE survey for businesses with less than 20 employees.
- Ceased collection of 'Supervisor' in status of employee.

2000

- Questions introduced on how employees' pay is set.
- Live Respondent Mean imputation method introduced for the sampled strata, and ratio imputation method introduced for the completely enumerated strata.
- Business Provision adjustments introduced.
- Second-stage sample reduced significantly.

- 'Over award and over agreement pay' not collected separately but included in 'Base pay'.
- Ceased collection of 'Apprentice/trainee' in status of employee.

1996

• Survey frequency changed to biennial.

1995

• Sample redesign on an ANZSIC basis.

1993

• Payments from workplace and enterprise agreements included in 'Base pay' rather than 'Over award and over agreement pay'.

1986

• Survey frequency changed to annual.

1983

• First-stage sample frame changed to ABS Business Register.

1981

• Survey frequency changed to biennial.

1974

• Annual survey commenced; first-stage sample frame comprised lists of employers subject to payroll tax and lists of government departments and hospitals.

Glossary

Show all

Adult rate

Payment at the full rate stipulated in an award, agreement or the minimum wage order in the relevant jurisdiction.

Apprentice or trainee rate

Payment at a rate stipulated for apprentices or trainees in an award, agreement or the minimum wage order in the relevant jurisdiction.

Average (mean) earnings

The earnings amount obtained by dividing the total earnings of a group (e.g. full-time employees) by the number of employees in that group.

Award only

Awards are legally enforceable determinations made by federal or state industrial tribunals that set the terms of employment (pay and/or conditions), usually in a particular industry or occupation.

An award may be the sole mechanism used to set the pay and/or conditions for an employee or group of employees, or may be used in conjunction with an individual or collective agreement. Employees are classified to the Award only category if they are paid at the rate of pay specified in the award, and are not paid more than that rate of pay.

Cash earnings

Remuneration paid to employees on a regular and frequent basis (quarterly or more frequently) for time worked or work done, and for time not worked such as recreation and other types of leave. Cash earnings (inclusive of amounts salary sacrificed) are gross amounts, that is, before tax and other items (e.g. superannuation) are deducted.

Casual employees

Casual employees usually receive a higher rate of pay to compensate for lack of permanency and leave entitlements.

Collective agreement

An agreement between an employer (or group of employers) and a group of employees (or one or more unions or employee associations representing the employees). A collective agreement sets the terms of employment (pay and/or conditions) for a group of employees, and is usually registered with a Federal or State industrial tribunal or authority.

Employees are classified to the Collective agreement category if they had the main part of their pay set by a collective agreement (registered or unregistered) or enterprise award.

Disability rate

Payment rate stipulated in the National Minimum Wage Order (or an award or agreement with a specific schedule) for employees with a disability who:

• are unable to perform the range of duties to the competence level required of an employee within the class of work for which the employee is engaged because of the effects of disability on their productive capacity; and

• who meet the impairment criteria for receipt of a Disability Support Pension.

Employees

Persons who worked for a private or public sector employer and received pay for the reference period in the form of wages or salaries, a commission while also receiving a retainer, tips, piece rates or payments in kind. Persons who operated their own incorporated enterprises with or without hiring employees are also included as employees.

Employer size

A measure of the size of the business in terms of the number of employees within that business. The employer size reflects the size of the business in a particular state or territory and not necessarily the size of the business Australia-wide.

Full-time employees

Full-time employees are permanent, temporary and casual employees who normally work the agreed or award hours for a full-time employee in their occupation and received pay for any part of the reference period. If agreed or award hours do not apply, employees are regarded as full-time if they ordinarily work 35 hours or more per week.

Individual arrangement

An arrangement between an employer and an individual employee on the terms of employment (pay and/or conditions) for the employee. Common types of individual arrangements are individual contracts, letters of offer and common law contracts. Employees are classified to the Individual arrangement category if they have their pay set by an individual contract, individual agreement registered with a Federal or State industrial tribunal or authority (e.g. Australian Workplace Agreement), common law contract (including for award or agreement free employees), or if they receive over-award payments by individual agreement.

However, the Fair Work Act 2009 does not allow the making of new individual employee agreements. Collective enterprise agreements contain a provision which allows flexibility in the workplace to be achieved by agreement between an employer and individual employee. Agreements which existed under the Workplace Relations Act will continue in existence under the Fair Work Act 2009 as 'agreement-based transitional instruments'. These are defined by the Fair Work (Transitional and Consequential Amendments) Act 2009 (TA Act) (http://www8.austlii.edu.au/cgi-bin/viewdb/au/legis/cth/consol_act/fwpacaa2009656/).

Industry

Industry is classified according to the <u>Australian and New Zealand Standard Industrial</u>

Classification, 2006 (Revision 2.0) (https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0).

Junior rate

Payment at a proportion of the full adult rate stipulated in an award, agreement or the National Minimum Wage Order in the relevant jurisdiction, based on age.

Managerial employees

Employees who have strategic responsibilities in the conduct or operations of the organisation and/or are in charge of a significant number of employees. These employees usually do not have an entitlement to paid overtime. Includes professionally qualified staff who primarily perform managerial tasks in conjunction with utilising their professional skills. Owner managers of incorporated enterprises are regarded as managerial employees.

Median earnings

The amount of earnings which divides employees into two groups containing equal numbers of employees, one half with earnings below the median and the other half with earnings above the median. The median is less affected by outliers and skewed data than the mean, and is usually the preferred measure of central tendency when the distribution is not symmetrical.

Method of setting pay

How an employee's pay is set. Methods are classified to one of the following categories: Award only; Collective agreement; Individual arrangement; or Owner manager of incorporated enterprise.

Non-managerial employees

Employees who are not managerial employees (as defined above), including non-managerial professionals and some employees with supervisory responsibilities.

Occupation

Occupation is classified according to the <u>Australian and New Zealand Standard Classification</u> of Occupations, 2022 (/statistics/classifications/anzsco-australian-and-new-zealand-standard-classification-occupations/2022).

Ordinary time cash earnings

Payment for award, standard or agreed hours of work, including allowances, penalty payments, payments by measured result and regular bonuses and commissions. Ordinary time cash earnings are inclusive of amounts salary sacrificed. Excluded are non-cash components of salary packages, overtime payments, retrospective pay, pay in advance,

leave loadings, severance pay, and termination and redundancy payments.

Ordinary time hours paid for

Award, standard or agreed hours of work, paid for at the ordinary time rate. Included is stand-by or reporting time which is part of standard hours of work, and that part of annual leave, paid sick leave and long service leave taken during the reference period.

Overtime earnings

Payment for hours worked in excess of award, standard or agreed hours of work.

Overtime hours paid for

Hours paid for in excess of award, standard or agreed hours of work.

Owner manager of incorporated enterprise

A person who works in their own incorporated enterprise - that is, a business entity which is registered as a separate legal entity to its members or owners (also known as a limited liability company). Owner managers of incorporated enterprises are presented separately in estimates by method of setting pay.

Part-time employees

Employees who normally work less than the agreed or award hours for a full-time employee in their occupation. If agreed or award hours do not apply, employees are regarded as part-time if they ordinarily work less than 35 hours per week.

Percentile

Any of a hundred divisions of an earnings or hours distribution. For example:

- 25% of employees earn less than or equal to the 25th percentile.
- 75% of employees earn less than or equal to the 75th percentile.

Permanent or fixed term employees

Permanent employees are usually employed on an ongoing basis and are entitled to paid annual and sick leave. Fixed term employees are employed for a specified period of employment, and may be entitled to paid leave.

Reference period

The survey refers to the last pay period ending on or before 19 May 2023. All estimates of earnings and hours in this release are weekly. For employees paid other than weekly, estimates of earnings and hours have been converted to a weekly basis.

Salary sacrifice

Salary sacrifice is defined as an arrangement where an employee agrees to forgo part of their pre-tax salary in return for benefits. Common types of salary sacrifice arrangements include pre-tax contributions to superannuation funds and novated leases for motor vehicles.

Sector

Public sector comprises local government authorities and all government departments and agencies created by, or reporting to, the Commonwealth, or State/Territory Parliaments. The private sector comprises all organisations not classified as public sector.

Total hours paid for

The sum of ordinary time hours paid for plus overtime hours paid for.

Weekly total cash earnings

The sum of weekly ordinary time cash earnings plus weekly overtime earnings.

Quality declaration - summary

Institutional environment

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see <u>ABS Institutional Environment (/ about/legislation-and-policy/abs-institutional-environment)</u>.

Relevance

The biennial Survey of Employee Earnings and Hours (EEH) produces statistics on the composition and distribution of earnings of employees, the hours for which they are paid, and the methods used to set their pay. Information is collected about the characteristics of employers, such as industry and sector, and their employees, such as occupation, type of employee, and method of setting pay. The principle users of the survey are located within Commonwealth and State government agencies, employer associations, industrial tribunals and unions. The estimates represent a critical information source for the Fair Work Commission and the Department of Employment and Workplace Relations. The survey also serves as an important data source for other ABS statistics such as the Wage Price Index.

Estimates are available by state/territory, industry, sector, occupation, sex, rate of pay (adult, junior, apprentice or trainee and disability), age group, managerial status, employee type, employer size, permanent/fixed term contract/casual status, full-time/part-time status and methods of setting pay.

Timeliness

The reference period for the 2023 Survey of Employee Earnings and Hours is the last pay period ending on or before 19 May 2023.

EEH estimates are released approximately eight months after the reference period for the May 2023 edition.

Accuracy

Information for the EEH survey is collected via web form questionnaires from a sample of approximately 8,300 private and public sector employers selected from the ABS Business Register. The employer sample is stratified by state, sector, industry division and employment size to ensure adequate state, sector and industry representation. These employers select a sample of employees from their payroll(s) using instructions provided by the ABS. Approximately 54,000 employees are sampled. A target minimum response rate is 90% for the survey as a whole and 90% for each state and industry.

There are two principal sources of error in surveys, sampling error and non-sampling error. Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise non-sampling error by the careful design and testing of questionnaires, detailed checking of the reported data and direct follow up with providers where significant errors are detected.

Sampling error occurs when a sample or subset of the population is surveyed rather than the entire population. One measure of the likely difference resulting from not including all of the population in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if the whole population had been included in the survey.

Coherence

The EEH survey has been conducted, either annually or biennially, since 1975. The survey has been conducted biennially from 1996 to 2018. It was postponed from May 2020 to May 2021, due to the labour market impacts and disruption from the first wave of the COVID-19

pandemic. The survey has continued it's biennial cycle from 2021. Ordinarily, the survey is conducted in respect of the last pay period ended on or before the third Friday in May of the reference year. The 2008 EEH survey, however, was conducted in respect of the last pay period ended on or before the third Friday in August.

Estimates of employee earnings produced from the EEH survey are based on the Australian conceptual framework for measures of employee remuneration. From 2006, the measure of employee earnings for estimates produced from the survey is regular wages and salaries in cash (including amounts salary sacrificed), that is, cash earnings. Prior to 2006, estimates of employee earnings excluded amounts salary sacrificed by employees. Estimates from the 2002 and 2004 surveys have also been reproduced on the new conceptual basis as an aid to analysis, and broad level estimates for these years were included in the electronic data release accompanying the May 2006 publication.

Data on how employees' pay was set in the reference period have been collected in the survey since 2000. The 2000 survey collected data on whether all or any part of employees' pay was set by an individual arrangement, collective agreement, award, or a combination of these. From 2002, each survey cycle has collected information on whether the main part of employees' pay was set by an individual arrangement, collective agreement or award.

The EEH Survey uses Australian standard classifications to facilitate data comparability across statistical series. Industry data from August 2008 onwards are classified according to the Australian and New Zealand Standard Industrial Classification, 2006 (Revision 2.0) (https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0). Data for earlier series are classified to the 1993 edition of ANZSIC. May 2023 data on employee occupation are classified according to the Australian and New Zealand Standard Classification of Occupations, 2022 (/ statistics/classifications/anzsco-australian-and-new-zealand-standard-classificationoccupations/2022). For May 2021, the classification used is the Australian and New Zealand Standard Classification of Occupations, 2013, Version (1.3) (https://www.abs.gov.au/ AUSSTATS/abs@.nsf/allprimarymainfeatures/FCC055588D3EBA19CA2584A8000E7889? opendocument=). From May 2014 to May 2018, the classification used is the Australian and New Zealand Standard Classification of Occupations, 2013 (Version 1.2) (https:// www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/ 4AF138F6DB4FFD4BCA2571E200096BAD?opendocument). From May 2006 to May 2012, the classification used is the Australian and New Zealand Standard Classification of Occupations, 2006 (First Edition) (https://www.abs.gov.au/AUSSTATS/abs@.nsf/ allprimarymainfeatures/F6A0BB67C088F217CA2575DF001CADC7?opendocument). Data for earlier series, issued since 1996, are classified to the Australian Standard Classification of Occupations, 1997 (Second Edition) (https://www.abs.gov.au/AUSSTATS/abs@.nsf/ allprimarymainfeatures/4B8C877612EC0AE4CA2571E5007A6B27?opendocument).

The ABS conducts a number of sample surveys of businesses which collect information about employee earnings, or other measures of employee remuneration, and estimates of numbers of employees, including the Survey of Average Weekly Earnings and the Labour Force Survey. Care should be taken when comparing estimates of average weekly earnings compiled from the EEH survey with those published biannually in Average Weekly Earnings, Australia (https://www.abs.gov.au/ausstats/abs@.nsf/mf/6302.0) because of differences in the earnings concepts being measured, methodological differences between the surveys and differences in the two samples used. Estimates of numbers of employees from the Survey of Employee Earnings and Hours are published for the first time in May 2010. Users are directed to Labour Force, Australia (https://www.abs.gov.au/ausstats/abs@.nsf/mf/6202.0) as the primary source of official ABS statistics of employment. Caution should be exercised when comparing estimates of numbers of employees from EEH with those published monthly in Labour Force, Australia (https://www.abs.gov.au/ausstats/abs@.nsf/mf/6202.0) as there are a number of differences in sample design, survey methodology and scope and coverage, between the two collections.

Interpretability

Employee Earnings and Hours, Australia, May 2023 contains a Methodology section which provides further information about data sources, terminology and other technical aspects of the series.

Accessibility

Employee Earnings and Hours, Australia, May 2023 is available electronically from the ABS website and includes downloadable Excel data files.

For inquiries about these and related statistics, contact the Customer Assistance Service via the ABS website <u>Contact Us (https://www.abs.gov.au/about/contact-us)</u> page. The ABS Privacy Policy outlines how the ABS will handle any personal information that you provide to us.

Technical note - sampling error

Reliability of estimates

As the estimates in this release are based on information relating to a sample of employers and employees, rather than a full enumeration, they are subject to sampling variability. That is, they may differ from the estimates that would have been produced if the information had

been obtained from all employers and all employees. The difference, called sampling error, should not be confused with inaccuracy that may occur because of imperfections in reporting by respondents or in processing by the ABS. Such inaccuracy is referred to as non-sampling error and may occur in any enumeration whether it be a full count or a sample. Efforts have been made to reduce non-sampling error by careful design of questionnaires, detailed checking of returns and quality control of processing.

The sampling error associated with any estimate can be estimated from the sample results. One measure of sampling error is given by the standard error, which indicates the degree to which an estimate may vary from the value that would have been obtained from a full enumeration (the 'true value'). There are about two chances in three that a sample estimate differs from the true value by less than one standard error, and about nineteen chances in twenty that the difference will be less than two standard errors.

An example of the use of a standard error is as follows. If the estimated average weekly total cash earnings for all employees paid by individual arrangement is \$1,753.70, with a standard error of \$18.60, there would be about two chances in three that a full enumeration would have given an estimate in the range \$1,735.10 to \$1,772.30 and about nineteen chances in twenty that it would be in the range \$1,716.50 to \$1,790.90.

The difference between two survey estimates is also an estimate and it is therefore subject to sampling variability. The standard error on the difference between two survey estimates in the one time period (i.e. x-y) can be calculated using the following formula:

$$SE(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

The formula above will overestimate the standard error where there is a positive correlation between two estimates (e.g. average weekly earnings for male and female school teachers). While this formula will only be accurate where there is no correlation between two estimates (e.g. estimates from different states), it is expected to provide a reasonable approximation of the standard error for the difference between two survey estimates.

The estimated average weekly total cash earnings for all male employees is \$1,731.20, with a standard error of \$15.20. For all female employees the estimated average weekly total cash earnings is \$1,261.50, with a standard error of \$11.10. Thus the difference between the estimate of male and female earnings is \$469.70. The estimate of the standard error of the difference between the average weekly total cash earnings employees of males and females is:

$$SE(\$1731.20 - \$1261.50) = \sqrt{(\$15.20)^2 + (\$11.10)^2} = \$18.80$$

There are about two chances in three that the true figure for the difference between

average weekly total cash earnings for males and females lies in the range \$450.90 to \$488.50 and about nineteen chances in twenty that the figure is in the range \$432.10 to \$507.30.

The formula above can be used to estimate the standard error on a difference between estimated averages in two different years. (The movement standard error will be approximately 1.4 times the standard error on the level estimate, if the standard errors on the two level estimates are similar).

Another measure of the sampling error is the relative standard error, which is obtained by expressing the standard error as a percentage of the estimate.

An asterisk appears against an estimate in this release where the sampling variability is considered high. For the tables in this release, estimates with relative standard errors above 25% have been labelled with a cell comment. Cell comments labelled on estimates with a relative standard error above 25% (i.e. relative standard error of 25% to 50% or relative standard error greater than 50%) have been applied based on unrounded data.

Standard errors can be used to construct confidence intervals around the estimated proportions. There are about two chances in three that the 'true' value is within the interval that ranges from the sample estimate minus one standard error (estimate - 1xSE) to the sample estimate plus one standard error (estimate + 1xSE). There are approximately 19 chances in 20 that the 'true' value lies within the interval from the estimate minus two standard errors (estimate - 2xSE) to the estimate plus two standard errors (estimate + 2xSE).

The above rule gives a symmetric confidence interval that is reasonably accurate when the estimated proportion is not too near 0.00 or 1.00. Where the estimated proportion is close to 0.00 or 1.00 it would be more accurate to use a confidence interval that was not symmetric around the sample estimate. If an estimate is close to 1.00, then the upper boundary of the confidence interval should be closer to the sample estimate than suggested above, while the lower boundary should be further from the sample estimate. Similarly, if an estimate is close to 0.00, then the lower boundary of the confidence interval should be closer to the sample estimate than suggested above, while the upper boundary should be further from the sample estimate. In particular, the symmetric confidence interval could include values that are not between 0.00 and 1.00. In such a case a good rule of thumb is to use a confidence interval of the same size as the symmetric one, but with the lower (or upper) boundary set to 0.00 (or 1.00).

Each data cube contains estimates of standard errors from which confidence intervals may be constructed.

Abbreviations

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ABN Australian Business Numbe	ABN
ABR Australian Business Registe	ABR
ABS Australian Bureau of Statistic	ABS
SBR Australian Bureau of Statistics Business Registe	ABSBR
SCO Australian and New Zealand Standard Classification of Occupation	ANZSCO
ZSIC Australian and New Zealand Standard Industrial Classification	ANZSIC
ATO Australian Taxation Office	ATO
EEH Survey of Employee Earnings and Hour	EEH
YGW Pay As You Go Withholding	PAYGW
TAU Type of Activity Uni	TAU

Short Survey of Employment Conditions (SSEC) experimental estimates

Introduction

The SSEC was collected as a short follow-up survey to EEH May 2023. SSEC was based off the same scope and coverage for its frame as EEH, along with sharing the sample of units selected. To minimise the reporting effort for businesses, only the main state of operation was surveyed for a given business. This is different to the EEH survey which considers all states of operation of a business.

While the SSEC was a non-compulsory survey, in contrast to the compulsory EEH, around 70% of the sample of just over 7,000 businesses responded. The ABS would like to thank these businesses for their important contribution to this representative data, on a topic for which official statistics have not previously been available.

Data collection

Data was collected via a short electronic questionnaire, with questions focused on the use of restraint clauses as a part of their employment conditions. While there is a high level of interest in Non-compete clauses, information was collected on the four most commonly referenced restraint clauses. These included:

- Non-disclosure
- Non-compete

- Non-solicitation of clients
- Non-solicitation of co-workers

SSEC questions

In order to minimise the reporting effort for businesses, the ABS used simple questions that could be easily responded to and answered in respect of the entire business (rather than the specific employee/job level information collected in EEH).

The full set of questions are outlined below.

- Question 1 Are the following conditions included in employment contracts for any employees in this business?
- a. Non-disclosure (i.e. to not share confidential information when they leave)
- b. Non-compete (i.e to not join or start a competitor when they leave)
- c. Non-solicitation of clients (i.e to not solicit or offer services to former clients or customers when they leave)
- d. Non-solicitation of co-workers (i.e. to not solicit former co-workers when they leave)
- Question 2 What percentage of employees in this business have each of the conditions in their contract?
- Question 3 What types of employees have these conditions in their employment contracts?
- Question 4 Has this business's use of these conditions in employment contracts increased, remained the same or decreased over the past 5 years?
- Question 5 Has the business/organisation ever taken (or threatened) any legal action to enforce on of these conditions?
- Question 6 How likely is it that this business would include any of these conditions in future employment contracts?
- Question 7 Has a potential employee ever turned down a job offer from this business because of a Non-compete clause with their existing employer?

Data output

SSEC data can be found in the <u>SSEC Data Downloads (/articles/article-65baef259395b)</u>. Data is presented as a representative proportion of businesses that responded. Some questions were asked of all businesses, and some were only asked as follow-up questions if a particular restraint clause was used. For example, Question 2 to Question 5 were only asked when Question 1 indicated one of the restraint clauses had been used by the business.

An 'unsure' response option was included to remove any barriers for respondents to completing the survey questions. To minimise the reporting effort of the additional survey,

and in noting that only a relatively small percentages of businesses were 'unsure', the ABS did not contact these employers to ask them to clarify this response. Some of these 'unsure' responses may indicate that this information was not easy to obtain from business systems or key personnel, or a range of other potential factors, and should not be assumed to necessarily be an indication of an awareness of conditions.